



October 02, 2012

Brad Davis  
Zia Engineering & Environmental  
755 S Telshor Blvd Ste F-201  
Las Cruces, NM 88011  
TEL: (575) 993-6824  
FAX (575) 532-1587  
RE: LC-38 Diesel Spill

Order No.: 1209152

Dear Brad Davis:

DHL Analytical, Inc. received 3 sample(s) on 9/20/2012 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of DoD QSM Ver 4.2 and NELAC except where noted in the Case Narrative. All non-NELAC methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. This report shall not be reproduced except in full without the written approval of DHL Analytical, Inc. Thank you for using DHL Analytical.

Sincerely,

A handwritten signature in black ink, appearing to read "John DuPont".

John DuPont  
General Manager

This report was performed under the accreditation of the State of Texas & DoD Laboratory  
Certification Number: T104704211-12-8 & DoD ELAP #ADE-1416 v2



# Table of Contents

Miscellaneous Documents ..... 3

CaseNarrative 1209152 ..... 9

WorkOrderSampleSummary 1209152 ..... 11

PrepDatesReport 1209152 ..... 12

AnalyticalDatesReport 1209152 ..... 13

Analytical Report 1209152 ..... 14

AnalyticalQCSummaryReport 1209152 ..... 17

Sequence Report 1209152 ..... 23

755 S. Tebitor Blvd. Ste. F-201  
Las Cruces, NM 88011  
575-532-1526 u  
575-532-1581 f

## CHAIN OF CUSTODY RECORD

#1209152

PAGE 1 OF 1

[illegible]

PLEASE USE BALL POINT PEN

DISTRIBUTION: WHITE - PROJECT FILES; YELLOW - LAB; PINK - FIELD COPY

From: (505) 532-1526  
Zia Engineering

Origin ID: LRUA

FedEx  
Express



J12201207160325

755 S. Telshor Blvd.  
Suite Q-201  
Las Cruces, NM 88011

SHIP TO: (512) 388-8222

BILL SENDER

John Dupont  
DHL Analytical  
2300 DOUBLE CREEK DR

ROUND ROCK, TX 78664

Ship Date: 19SEP12  
ActWgt: 65.0 LB  
CAD: 102287640/NET3300

Delivery Address Bar Code



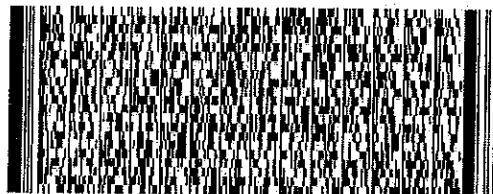
Ref # Bradley Davis  
Invoice # Samples  
PO # FWSE-09-015 Task 34  
Dept #

THU - 20 SEP A1  
PRIORITY OVERNIGHT

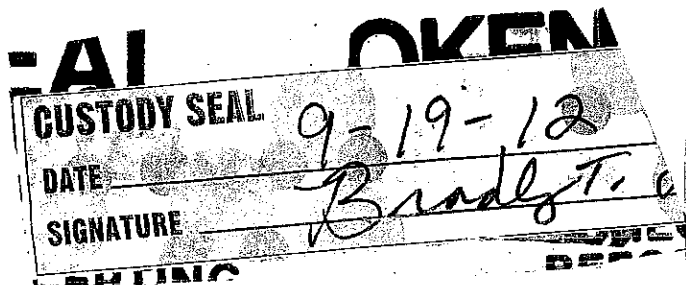
TRK# 7990 0550 0607  
0201

**XH BSMA**

78664  
TX-US  
AUS



515G10D3A/A44



## Sample Receipt Checklist

Client Name Zia Engineering &amp; Environmental

Date Received: 9/20/2012

Work Order Number 1209152

Received by JB

Checklist completed by:

9/20/2012

Date

Reviewed by

Initials

9/20/2012

Date

Carrier name: FedEx 1day

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	3.5 °C
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>

Adjusted?

No

Checked by

Any No response must be detailed in the comments section below.

Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments: \_\_\_\_\_

Corrective Action \_\_\_\_\_

# DHL Analytical, Inc.

## Laboratory Review Checklist: Reportable Data

<b>Project Name:</b> LC-38 Diesel Spill		<b>Date:</b> 10/02/2012					
<b>Reviewer Name:</b> Angie O'Donnell		<b>Laboratory Work Order:</b> 1209152					
<b>Prep Batch Number(s):</b> See Prep Dates Report		<b>Run Batch:</b> See Analytical Dates Report					
# <sup>1</sup>	A <sup>2</sup>	Description	Yes	No	NA <sup>3</sup>	NR <sup>4</sup>	ER# <sup>5</sup>
R1	OI	<b>Chain-of-Custody (C-O-C)</b>					
		1) Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				R1-01
		2) Were all departures from standard conditions described in an exception report?			X		
R2	OI	<b>Sample and Quality Control (QC) Identification</b>					
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		2) Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	<b>Test Reports</b>					
		1) Were all samples prepared and analyzed within holding times?	X				
		2) Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		3) Were calculations checked by a peer or supervisor?	X				
		4) Were all analyte identifications checked by a peer or supervisor?	X				
		5) Were sample quantitation limits reported for all analytes not detected?	X				
		6) Were all results for soil and sediment samples reported on a dry weight basis?			X		
		7) Were % moisture (or solids) reported for all soil and sediment samples?			X		
		8) If required for the project, TICs reported?			X		
R4	O	<b>Surrogate Recovery Data</b>					
		1) Were surrogates added prior to extraction?	X				
		2) Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			R4-02
R5	OI	<b>Test Reports/Summary Forms for Blank Samples</b>					
		1) Were appropriate type(s) of blanks analyzed?	X				
		2) Were blanks analyzed at the appropriate frequency?	X				
		3) Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		4) Were blank concentrations < MQL?	X				
R6	OI	<b>Laboratory Control Samples (LCS):</b>					
		1) Were all COCs included in the LCS?	X				
		2) Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		3) Were LCSs analyzed at the required frequency?	X				
		4) Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		5) Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	X				
		6) Was the LCSD RPD within QC limits (if applicable)?	X				
R7	OI	<b>Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Data</b>					
		1) Were the project/method specified analytes included in the MS and MSD?	X				
		2) Were MS/MSD analyzed at the appropriate frequency?	X				
		3) Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		4) Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	<b>Analytical Duplicate Data</b>					
		1) Were appropriate analytical duplicates analyzed for each matrix?	X				
		2) Were analytical duplicates analyzed at the appropriate frequency?	X				
		3) Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	<b>Method Quantitation Limits (MQLs):</b>					
		1) Are the MQLs for each method analyte included in the laboratory data package?	X				
		2) Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		3) Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	<b>Other Problems/Anomalies</b>					
		1) Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		2) Were all necessary corrective actions performed for the reported data?	X				
		3) Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).

3 NA = Not applicable.

4 NR = Not Reviewed.

5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

# DHL Analytical, Inc.

## Laboratory Review Checklist (continued): Supporting Data

Project Name: LC-38 Diesel Spill

Date: 10/02/2012

Reviewer Name: Angie O'Donnell

Laboratory Work Order: 1209152

# <sup>1</sup>	A <sup>2</sup>	Description	Yes	No	NA <sup>3</sup>	NR <sup>4</sup>	ER# <sup>5</sup>
S1	OI	<b>Initial Calibration (ICAL)</b>					
		1) Were response factors and/or relative response factors for each analyte within QC limits?	X				
		2) Were percent RSDs or correlation coefficient criteria met?	X				
		3) Was the number of standards recommended in the method used for all analytes?	X				
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		5) Are ICAL data available for all instruments used?	X				
		6) Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	<b>Initial and Continuing calibration Verification (ICCV and CCV) and Continuing Calibration blank (CCB)</b>					
		1) Was the CCV analyzed at the method-required frequency?	X				
		2) Were percent differences for each analyte within the method-required QC limits?	X				
		3) Was the ICAL curve verified for each analyte?	X				
		4) Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	<b>Mass Spectral Tuning</b>					
		1) Was the appropriate compound for the method used for tuning?	X				
		2) Were ion abundance data within the method-required QC limits?	X				
S4	O	<b>Internal Standards (IS)</b>					
		1) Were IS area counts and retention times within the method-required QC limits?	X				S4-01
S5	OI	<b>Raw Data (NELAC section 1 appendix A glossary, and section 5.12)</b>					
		1) Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		2) Were data associated with manual integrations flagged on the raw data?	X				
S6	O	<b>Dual Column Confirmation</b>					
		1) Did dual column confirmation results meet the method-required QC?			X		
S7	O	<b>Tentatively Identified Compounds (TICs)</b>					
		1) If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	<b>Interference Check Sample (ICS) Results</b>					
		1) Were percent recoveries within method QC limits?	X				
S9	I	<b>Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions</b>					
		1) Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	<b>Method Detection Limit (MDL) Studies</b>					
		1) Was a MDL study performed for each reported analyte?	X				
		2) Is the MDL either adjusted or supported by the analysis of DCSSs?	X				
S11	OI	<b>Proficiency Test Reports</b>					
		1) Was the lab's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	<b>Standards Documentation</b>					
		1) Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	<b>Compound/Analyte Identification Procedures</b>					
		1) Are the procedures for compound/analyte identification documented?	X				
S14	OI	<b>Demonstration of Analyst Competency (DOC)</b>					
		1) Was DOC conducted consistent with NELAC Chapter 5C?	X				
		2) Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	<b>Verification/Validation Documentation for Methods (NELAC Chap 5)</b>					
		1) Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	<b>Laboratory Standard Operating Procedures (SOPs)</b>					
		1) Are laboratory SOPs current and on file for each method performed?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).

3 NA = Not applicable.

4 NR = Not Reviewed.

5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

# Laboratory Data Package Signature Page

This data package consists of:

This signature page, the laboratory review checklist, and the following reportable data:

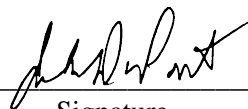
- R1 Field chain-of-custody documentation;
- R2 Sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - a) Items consistent with NELAC 5.13
  - b) dilution factors,
  - c) preparation methods,
  - d) cleanup methods, and
  - e) if required for the project, tentatively identified compounds (TICs).
- R4 Surrogate recovery data including:
  - a) Calculated recovery (%R), and
  - b) The laboratory's surrogate QC limits.
- R5 Test reports/summary forms for blank samples;
- R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - a) LCS spiking amounts,
  - b) Calculated %R for each analyte, and
  - c) The laboratory's LCS QC limits.
- R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - a) Samples associated with the MS/MSD clearly identified,
  - b) MS/MSD spiking amounts,
  - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - d) Calculated %Rs and relative percent differences (RPDs), and
  - e) The laboratory's MS/MSD QC limits
- R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - a) the amount of analyte measured in the duplicate,
  - b) the calculated RPD, and
  - c) the laboratory's QC limits for analytical duplicates.
- R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- R10 Other problems or anomalies.

The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

**Release Statement:** I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

John DuPont – General Manager

Scott Schroeder – Technical Director



Signature

10/02/12

Date



**CLIENT:** Zia Engineering & Environmental  
**Project:** LC-38 Diesel Spill  
**Lab Order:** 1209152

---

**CASE NARRATIVE**

---

This case narrative describes abnormalities and deviations that may affect the results and summarizes all known issues that need to be highlighted for the data user to assess the results. This case narrative and the report contents are compliant with DoD QSM Ver 4.2 and NELAC.

Samples were analyzed using the methods outlined in the following references:

Method SW6020A - Metals Analysis  
Method M8015D - DRO Analysis  
Method M3500-Cr D - Hexavalent Chromium Analysis

Exception Report R1-01

The samples were received on and log-in performed on 9/20/2012. A total of 3 samples were received and analyzed. The samples arrived in good condition and were properly packaged.

Exception Report R4-02

For DRO Analysis, the recovery of surrogate Octacosane for the samples, Continuing Calibration Verification (CCV3-12094), Matrix Spike and Matrix Spike Duplicate (1209152-01 MS/MSD) was slightly above the method control limits. These are flagged accordingly in the Analytical Data Report and the QC Summary report. The recovery of the remaining surrogate for these samples was within method control limits. No further corrective actions were taken.

Exception Report S4-01

For Metals Analysis, the response factor of Internal Standard Scandium 45-1 for Sample LC38-DSPL-RB-001-0912 and the Continuing Calibration Blank (CCB1-120924) was above the method control limits as specified for DOD (30-120%). This internal standard was within method control limits for the analytical method SW6020A. The associated analyte was within method control limits for the QC sample. No further corrective actions were taken.

A summary of project communication follows:

DHL Analytical received the Project RFQ from the client on 12/29/09. Completed RFQ returned to client via email on 1/07/2010. Purchase Order/Terms and Conditions received and signed and approved by both parties on 01/25/2010.

Brad Davis of Zia requested a bottle kit via email from Jennifer Barker of DHL on 7/27/12.

---

---

**CLIENT:** Zia Engineering & Environmental  
**Project:** LC-38 Diesel Spill  
**Lab Order:** 1209152

## **CASE NARRATIVE**

---

DHL Bottle kit #3503 was sent on 8/13/12 via Lonestar Overnight, to arrive by 8/15/12.

This sample delivery group arrived at DHL Analytical 9/20/12. Sample summary sent via email from Log-in to client on 9/20/12.

All hardcopies for the sample kit request, bill of lading for sample kit sent and login summary are kept in project folder.

---

**CLIENT:** Zia Engineering & Environmental  
**Project:** LC-38 Diesel Spill  
**Lab Order:** 1209152**Work Order Sample Summary**

---

<b>Lab Smp ID</b>	<b>Client Sample ID</b>	<b>Tag Number</b>	<b>Date Collected</b>	<b>Date Recved</b>
1209152-01	LC38-DSPL-MW-002-0912		09/19/12 10:35 AM	9/20/2012
1209152-02	LC38-DSPL-MW-003-0912		09/19/12 12:40 PM	9/20/2012
1209152-03	LC38-DSPL-RB-001-0912		09/19/12 11:30 AM	9/20/2012

**Lab Order:** 1209152  
**Client:** Zia Engineering & Environmental  
**Project:** LC-38 Diesel Spill

**PREP DATES REPORT**

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1209152-01A	LC38-DSPL-MW-002-0912	09/19/12 10:35 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	09/21/12 08:47 AM	53942
1209152-01B	LC38-DSPL-MW-002-0912	09/19/12 10:35 AM	Aqueous	SW7196A	Hexachrom Prep Water	09/20/12 10:00 AM	53921
1209152-01C	LC38-DSPL-MW-002-0912	09/19/12 10:35 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	09/20/12 10:21 AM	53923
1209152-02A	LC38-DSPL-MW-003-0912	09/19/12 12:40 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	09/21/12 08:47 AM	53942
1209152-02B	LC38-DSPL-MW-003-0912	09/19/12 12:40 PM	Aqueous	SW7196A	Hexachrom Prep Water	09/20/12 10:00 AM	53921
1209152-02C	LC38-DSPL-MW-003-0912	09/19/12 12:40 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	09/20/12 10:21 AM	53923
1209152-03A	LC38-DSPL-RB-001-0912	09/19/12 11:30 AM	Equip Blank	SW3005A	Aq Prep Metals : ICP-MS	09/21/12 08:47 AM	53942
1209152-03B	LC38-DSPL-RB-001-0912	09/19/12 11:30 AM	Equip Blank	SW7196A	Hexachrom Prep Water	09/20/12 10:00 AM	53921
1209152-03C	LC38-DSPL-RB-001-0912	09/19/12 11:30 AM	Equip Blank	SW3510C	Aq Prep Sep Funnel: DRO	09/20/12 10:21 AM	53923

**Lab Order:** 1209152  
**Client:** Zia Engineering & Environmental  
**Project:** LC-38 Diesel Spill

**ANALYTICAL DATES REPORT**

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1209152-01A	LC38-DSPL-MW-002-0912	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	53942	1	09/24/12 02:02 PM	ICP-MS3_120924B
1209152-01B	LC38-DSPL-MW-002-0912	Aqueous	M3500-Cr D	Hexavalent Chromium-Water	53921	1	09/20/12 11:12 AM	UV/VIS_2_120920A
1209152-01C	LC38-DSPL-MW-002-0912	Aqueous	M8015D	TPH Extractable by GC - Water	53923	1	09/24/12 01:13 PM	GC15_120924A
1209152-02A	LC38-DSPL-MW-003-0912	Aqueous	SW6020A	Trace Metals: ICP-MS - Water	53942	1	09/24/12 04:49 PM	ICP-MS3_120924B
1209152-02B	LC38-DSPL-MW-003-0912	Aqueous	M3500-Cr D	Hexavalent Chromium-Water	53921	1	09/20/12 11:12 AM	UV/VIS_2_120920A
1209152-02C	LC38-DSPL-MW-003-0912	Aqueous	M8015D	TPH Extractable by GC - Water	53923	1	09/24/12 01:21 PM	GC15_120924A
1209152-03A	LC38-DSPL-RB-001-0912	Equip Blank	SW6020A	Trace Metals: ICP-MS - Water	53942	1	09/24/12 04:54 PM	ICP-MS3_120924B
1209152-03B	LC38-DSPL-RB-001-0912	Equip Blank	M3500-Cr D	Hexavalent Chromium-Water	53921	1	09/20/12 11:12 AM	UV/VIS_2_120920A
1209152-03C	LC38-DSPL-RB-001-0912	Equip Blank	M8015D	TPH Extractable by GC - Water	53923	1	09/24/12 01:30 PM	GC15_120924A

**DHL Analytical, Inc.****Date:** 02-Oct-12

**CLIENT:** Zia Engineering & Environmental  
**Project:** LC-38 Diesel Spill  
**Project No:**  
**Lab Order:** 1209152

**Client Sample ID:** LC38-DSPL-MW-002-0912  
**Lab ID:** 1209152-01  
**Collection Date:** 09/19/12 10:35 AM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TPH EXTRACTABLE BY GC - WATER</b>		<b>M8015D</b>					Analyst: <b>DO</b>
TPH-DRO C10-C28	0.0697	0.0500	0.100	J	mg/L	1	09/24/12 01:13 PM
Surr: Isopropylbenzene	74.1	0	47-142		%REC	1	09/24/12 01:13 PM
Surr: Octacosane	126	0	51-124	S	%REC	1	09/24/12 01:13 PM
<b>TRACE METALS: ICP-MS - WATER</b>		<b>SW6020A</b>					Analyst: <b>AJR</b>
Chromium	0.0284	0.00200	0.00600		mg/L	1	09/24/12 02:02 PM
<b>HEXAVALENT CHROMIUM-WATER</b>		<b>M3500-CR D</b>					Analyst: <b>LM</b>
Hexavalent Chromium	<0.00800	0.00800	0.0100		mg/L	1	09/20/12 11:12 AM

<b>Qualifiers:</b>	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 02-Oct-12

**CLIENT:** Zia Engineering & Environmental  
**Project:** LC-38 Diesel Spill  
**Project No:**  
**Lab Order:** 1209152

**Client Sample ID:** LC38-DSPL-MW-003-0912  
**Lab ID:** 1209152-02  
**Collection Date:** 09/19/12 12:40 PM  
**Matrix:** AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TPH EXTRACTABLE BY GC - WATER</b>		<b>M8015D</b>					Analyst: <b>DO</b>
TPH-DRO C10-C28	0.0687	0.0500	0.100	J	mg/L	1	09/24/12 01:21 PM
Surr: Isopropylbenzene	68.2	0	47-142		%REC	1	09/24/12 01:21 PM
Surr: Octacosane	129	0	51-124	S	%REC	1	09/24/12 01:21 PM
<b>TRACE METALS: ICP-MS - WATER</b>		<b>SW6020A</b>					Analyst: <b>AJR</b>
Chromium	0.00820	0.00200	0.00600		mg/L	1	09/24/12 04:49 PM
<b>HEXAVALENT CHROMIUM-WATER</b>		<b>M3500-CR D</b>					Analyst: <b>LM</b>
Hexavalent Chromium	<0.00800	0.00800	0.0100		mg/L	1	09/20/12 11:12 AM

<b>Qualifiers:</b>	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

**DHL Analytical, Inc.**

Date: 02-Oct-12

**CLIENT:** Zia Engineering & Environmental  
**Project:** LC-38 Diesel Spill  
**Project No:**  
**Lab Order:** 1209152

**Client Sample ID:** LC38-DSPL-RB-001-0912  
**Lab ID:** 1209152-03  
**Collection Date:** 09/19/12 11:30 AM  
**Matrix:** EQUIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
<b>TPH EXTRACTABLE BY GC - WATER</b>		<b>M8015D</b>					Analyst: <b>DO</b>
TPH-DRO C10-C28	0.0580	0.0500	0.100	J	mg/L	1	09/24/12 01:30 PM
Surr: Isopropylbenzene	71.4	0	47-142		%REC	1	09/24/12 01:30 PM
Surr: Octacosane	130	0	51-124	S	%REC	1	09/24/12 01:30 PM
<b>TRACE METALS: ICP-MS - WATER</b>		<b>SW6020A</b>					Analyst: <b>AJR</b>
Chromium	0.00495	0.00200	0.00600	J	mg/L	1	09/24/12 04:54 PM
<b>HEXAVALENT CHROMIUM-WATER</b>		<b>M3500-CR D</b>					Analyst: <b>LM</b>
Hexavalent Chromium	<0.00800	0.00800	0.0100		mg/L	1	09/20/12 11:12 AM

<b>Qualifiers:</b>	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		



**CLIENT:** Zia Engineering & Environmental  
**Work Order:** 1209152  
**Project:** LC-38 Diesel Spill

**ANALYTICAL QC SUMMARY REPORT****RunID: GC15\_120924A**

The QC data in batch 53923 applies to the following samples: 1209152-01C, 1209152-02C, 1209152-03C

Sample ID: <b>LCS-53923</b>	Batch ID: <b>53923</b>	TestNo: <b>M8015D</b>	Units: <b>mg/L</b>							
SampType: <b>LCS</b>	Run ID: <b>GC15_120924A</b>	Analysis Date: <b>9/24/2012 12:22:14 PM</b>	Prep Date: <b>9/20/2012</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

TPH-DRO C10-C28	1.21	0.100	1.250	0	96.5	50	114			
Surr: Isopropylbenzene	0.0871		0.1000		87.1	47	142			
Surr: Octacosane	0.123		0.1000		123	51	124			

Sample ID: <b>MB-53923</b>	Batch ID: <b>53923</b>	TestNo: <b>M8015D</b>	Units: <b>mg/L</b>							
SampType: <b>MBLK</b>	Run ID: <b>GC15_120924A</b>	Analysis Date: <b>9/24/2012 12:56:10 PM</b>	Prep Date: <b>9/20/2012</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

TPH-DRO C10-C28	<0.0800	0.100								
Surr: Isopropylbenzene	0.0614		0.1000		61.4	47	142			
Surr: Octacosane	0.119		0.1000		119	51	124			

Sample ID: 1209152-01CMS	Batch ID: 53923	TestNo: M8015D	Units: mg/L							
SampType: MS	Run ID: GC15_120924A	Analysis Date: 9/24/2012 4:10:59 PM	Prep Date: 9/20/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

TPH-DRO C10-C28	1.39	0.100	1.250	0.06965	105	50	114			
Surr: Isopropylbenzene	0.0742		0.1000		74.2	47	142			
Surr: Octacosane	0.126		0.1000		126	51	124			S

Sample ID: 1209152-01CMSD	Batch ID: 53923	TestNo: M8015D	Units: mg/L							
SampType: MSD	Run ID: GC15_120924A	Analysis Date: 9/24/2012 4:19:26 PM	Prep Date: 9/20/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

TPH-DRO C10-C28	1.42	0.100	1.250	0.06965	108	50	114	2.43	30	
Surr: Isopropylbenzene	0.0780		0.1000		78.0	47	142	0	0	
Surr: Octacosane	0.131		0.1000		131	51	124	0	0	S

**Qualifiers:** B Analyte detected in the associated Method Blank  
J Analyte detected between MDL and RL  
ND Not Detected at the Method Detection Limit  
RL Reporting Limit  
J Analyte detected between SDL and RL

DF Dilution Factor  
MDL Method Detection Limit  
R RPD outside accepted control limits  
S Spike Recovery outside control limits  
N Parameter not NELAC certified

**CLIENT:** Zia Engineering & Environmental  
**Work Order:** 1209152  
**Project:** LC-38 Diesel Spill

## ANALYTICAL QC SUMMARY REPORT

**RunID:** GC15\_120924A

Sample ID: <b>ICV-120924</b>	Batch ID: <b>R62691</b>	TestNo: <b>M8015D</b>	Units: <b>mg/L</b>							
SampType: <b>ICV</b>	Run ID: <b>GC15_120924A</b>	Analysis Date: <b>9/24/2012 12:13:44 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

TPH-DRO C10-C28	495	0.100	500.0	0	99.0	80	120			
Surr: Isopropylbenzene	22.0		25.00		87.9	80	120			
Surr: Octacosane	27.1		25.00		108	80	120			

Sample ID: <b>CCV1-120924</b>	Batch ID: <b>R62691</b>	TestNo: <b>M8015D</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>GC15_120924A</b>	Analysis Date: <b>9/24/2012 1:55:26 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

TPH-DRO C10-C28	222	0.100	250.0	0	88.9	80	120			
Surr: Isopropylbenzene	10.3		12.50		82.1	80	120			
Surr: Octacosane	12.4		12.50		99.2	80	120			

Sample ID: <b>CCV2-120924</b>	Batch ID: <b>R62691</b>	TestNo: <b>M8015D</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>GC15_120924A</b>	Analysis Date: <b>9/24/2012 3:37:09 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

TPH-DRO C10-C28	229	0.100	250.0	0	91.6	80	120			
Surr: Isopropylbenzene	10.5		12.50		83.9	80	120			
Surr: Octacosane	12.8		12.50		102	80	120			

Sample ID: <b>CCV3-120924</b>	Batch ID: <b>R62691</b>	TestNo: <b>M8015D</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>GC15_120924A</b>	Analysis Date: <b>9/24/2012 4:27:53 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

TPH-DRO C10-C28	280	0.100	250.0	0	112	80	120			
Surr: Isopropylbenzene	12.6		12.50		101	80	120			
Surr: Octacosane	15.2		12.50		122	80	120			S

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- J Analyte detected between MDL and RL
- ND Not Detected at the Method Detection Limit
- RL Reporting Limit
- J Analyte detected between SDL and RL

- DF Dilution Factor
- MDL Method Detection Limit
- R RPD outside accepted control limits
- S Spike Recovery outside control limits
- N Parameter not NELAC certified

**CLIENT:** Zia Engineering & Environmental  
**Work Order:** 1209152  
**Project:** LC-38 Diesel Spill

## ANALYTICAL QC SUMMARY REPORT

**RunID:** ICP-MS3\_120924B

The QC data in batch 53942 applies to the following samples: 1209152-01A, 1209152-02A, 1209152-03A

Sample ID: <b>MB-53942</b>	Batch ID: <b>53942</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>MBLK</b>	Run ID: <b>ICP-MS3_120924B</b>	Analysis Date: <b>9/24/2012 1:40:00 PM</b>	Prep Date: <b>9/21/2012</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chromium	<0.00200	0.00600								
----------	----------	---------	--	--	--	--	--	--	--	--

Sample ID: <b>LCS-53942</b>	Batch ID: <b>53942</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCS</b>	Run ID: <b>ICP-MS3_120924B</b>	Analysis Date: <b>9/24/2012 1:45:00 PM</b>	Prep Date: <b>9/21/2012</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chromium	0.210	0.00600	0.200	0	105	80	120			
----------	-------	---------	-------	---	-----	----	-----	--	--	--

Sample ID: <b>LCSD-53942</b>	Batch ID: <b>53942</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>LCSD</b>	Run ID: <b>ICP-MS3_120924B</b>	Analysis Date: <b>9/24/2012 1:51:00 PM</b>	Prep Date: <b>9/21/2012</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chromium	0.215	0.00600	0.200	0	108	80	120	2.59	15	
----------	-------	---------	-------	---	-----	----	-----	------	----	--

Sample ID: <b>1209152-01A SD</b>	Batch ID: <b>53942</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>SD</b>	Run ID: <b>ICP-MS3_120924B</b>	Analysis Date: <b>9/24/2012 2:08:00 PM</b>	Prep Date: <b>9/21/2012</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chromium	0.0306	0.0300	0	0.0284				7.63	10	
----------	--------	--------	---	--------	--	--	--	------	----	--

Sample ID: <b>1209152-01A PDS</b>	Batch ID: <b>53942</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>PDS</b>	Run ID: <b>ICP-MS3_120924B</b>	Analysis Date: <b>9/24/2012 3:04:00 PM</b>	Prep Date: <b>9/21/2012</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chromium	0.211	0.00600	0.200	0.0284	91.5	75	125			
----------	-------	---------	-------	--------	------	----	-----	--	--	--

Sample ID: <b>1209152-01A MS</b>	Batch ID: <b>53942</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>MS</b>	Run ID: <b>ICP-MS3_120924B</b>	Analysis Date: <b>9/24/2012 3:09:00 PM</b>	Prep Date: <b>9/21/2012</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chromium	0.201	0.00600	0.200	0.0284	86.5	80	120			
----------	-------	---------	-------	--------	------	----	-----	--	--	--

Sample ID: <b>1209152-01A MSD</b>	Batch ID: <b>53942</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>MSD</b>	Run ID: <b>ICP-MS3_120924B</b>	Analysis Date: <b>9/24/2012 3:15:00 PM</b>	Prep Date: <b>9/21/2012</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Chromium	0.203	0.00600	0.200	0.0284	87.1	80	120	0.644	15	
----------	-------	---------	-------	--------	------	----	-----	-------	----	--

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- J Analyte detected between MDL and RL
- ND Not Detected at the Method Detection Limit
- RL Reporting Limit
- J Analyte detected between SDL and RL

- DF Dilution Factor
- MDL Method Detection Limit
- R RPD outside accepted control limits
- S Spike Recovery outside control limits
- N Parameter not NELAC certified

**CLIENT:** Zia Engineering & Environmental  
**Work Order:** 1209152  
**Project:** LC-38 Diesel Spill

## ANALYTICAL QC SUMMARY REPORT

**RunID:** ICP-MS3\_120924B

Sample ID: <b>ICV1-120924</b>	Batch ID: <b>R62689</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>ICV</b>	Run ID: <b>ICP-MS3_120924B</b>	Analysis Date: <b>9/24/2012 1:03:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0978	0.00600	0.100	0	97.8	90	110			

Sample ID: <b>CCV1-120924</b>	Batch ID: <b>R62689</b>	TestNo: <b>SW6020A</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>ICP-MS3_120924B</b>	Analysis Date: <b>9/24/2012 3:31:00 PM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.210	0.00600	0.200	0	105	90	110			

Sample ID: <b>CCV2-120924</b>		Batch ID: <b>R62689</b>		TestNo: <b>SW6020A</b>		Units: <b>mg/L</b>				
SampType: <b>CCV</b>		Run ID: <b>ICP-MS3_120924B</b>		Analysis Date: <b>9/24/2012 5:39:00 PM</b>		Prep Date:				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.208	0.00600	0.200	0	104	90	110			

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- J Analyte detected between MDL and RL
- ND Not Detected at the Method Detection Limit
- RL Reporting Limit
- J Analyte detected between SDL and RL

- DF Dilution Factor
- MDL Method Detection Limit
- R RPD outside accepted control limits
- S Spike Recovery outside control limits
- N Parameter not NELAC certified

**CLIENT:** Zia Engineering & Environmental  
**Work Order:** 1209152  
**Project:** LC-38 Diesel Spill

## ANALYTICAL QC SUMMARY REPORT

**RunID:** UV/VIS\_2\_120920A

The QC data in batch 53921 applies to the following samples: 1209152-01B, 1209152-02B, 1209152-03B

Sample ID: <b>MB-53921</b>	Batch ID: <b>53921</b>	TestNo: <b>M3500-Cr D</b>	Units: <b>mg/L</b>							
SampType: <b>MBLK</b>	Run ID: <b>UV/VIS_2_120920A</b>	Analysis Date: <b>9/20/2012 11:08:00 AM</b>	Prep Date: <b>9/20/2012</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Hexavalent Chromium	<0.00800	0.0100								
---------------------	----------	--------	--	--	--	--	--	--	--	--

Sample ID: <b>LCS-53921</b>	Batch ID: <b>53921</b>	TestNo: <b>M3500-Cr D</b>	Units: <b>mg/L</b>							
SampType: <b>LCS</b>	Run ID: <b>UV/VIS_2_120920A</b>	Analysis Date: <b>9/20/2012 11:09:00 AM</b>	Prep Date: <b>9/20/2012</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Hexavalent Chromium	0.0961	0.0100	0.100	0	96.1	85	115			
---------------------	--------	--------	-------	---	------	----	-----	--	--	--

Sample ID: <b>LCSD-53921</b>	Batch ID: <b>53921</b>	TestNo: <b>M3500-Cr D</b>	Units: <b>mg/L</b>							
SampType: <b>LCSD</b>	Run ID: <b>UV/VIS_2_120920A</b>	Analysis Date: <b>9/20/2012 11:12:00 AM</b>	Prep Date: <b>9/20/2012</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Hexavalent Chromium	0.0978	0.0100	0.100	0	97.8	85	115	1.76	15	
---------------------	--------	--------	-------	---	------	----	-----	------	----	--

Sample ID: <b>1209152-01B MS</b>	Batch ID: <b>53921</b>	TestNo: <b>M3500-Cr D</b>	Units: <b>mg/L</b>							
SampType: <b>MS</b>	Run ID: <b>UV/VIS_2_120920A</b>	Analysis Date: <b>9/20/2012 11:12:00 AM</b>	Prep Date: <b>9/20/2012</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Hexavalent Chromium	0.0970	0.0100	0.100	0	97.0	85	115			
---------------------	--------	--------	-------	---	------	----	-----	--	--	--

Sample ID: <b>1209152-01B MSD</b>	Batch ID: <b>53921</b>	TestNo: <b>M3500-Cr D</b>	Units: <b>mg/L</b>							
SampType: <b>MSD</b>	Run ID: <b>UV/VIS_2_120920A</b>	Analysis Date: <b>9/20/2012 11:12:00 AM</b>	Prep Date: <b>9/20/2012</b>							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Hexavalent Chromium	0.0962	0.0100	0.100	0	96.2	85	115	0.828	15	
---------------------	--------	--------	-------	---	------	----	-----	-------	----	--

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- J Analyte detected between MDL and RL
- ND Not Detected at the Method Detection Limit
- RL Reporting Limit
- J Analyte detected between SDL and RL

- DF Dilution Factor
- MDL Method Detection Limit
- R RPD outside accepted control limits
- S Spike Recovery outside control limits
- N Parameter not NELAC certified

**CLIENT:** Zia Engineering & Environmental  
**Work Order:** 1209152  
**Project:** LC-38 Diesel Spill

## ANALYTICAL QC SUMMARY REPORT

**RunID:** UV/VIS\_2\_120920A

Sample ID: <b>ICV-120920</b>	Batch ID: <b>R62636</b>	TestNo: <b>M3500-Cr D</b>	Units: <b>mg/L</b>							
SampType: <b>ICV</b>	Run ID: <b>UV/VIS_2_120920A</b>	Analysis Date: <b>9/20/2012 11:08:00 AM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.0951	0.0100	0.100	0	95.1	90	110			

Sample ID: <b>CCV-120920</b>	Batch ID: <b>R62636</b>	TestNo: <b>M3500-Cr D</b>	Units: <b>mg/L</b>							
SampType: <b>CCV</b>	Run ID: <b>UV/VIS_2_120920A</b>	Analysis Date: <b>9/20/2012 11:16:00 AM</b>	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Hexavalent Chromium	0.196	0.0100	0.200	0	98.1	90	110			

**Qualifiers:**

- B Analyte detected in the associated Method Blank
- J Analyte detected between MDL and RL
- ND Not Detected at the Method Detection Limit
- RL Reporting Limit
- J Analyte detected between SDL and RL

- DF Dilution Factor
- MDL Method Detection Limit
- R RPD outside accepted control limits
- S Spike Recovery outside control limits
- N Parameter not NELAC certified

**Lab Order:** 1209152  
**Client:** Zia Engineering & Environmental  
**Project:** LC-38 Diesel Spill

## Sequence Report

**Run ID: GC15\_120924A**

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
ICV-120924	-----	M8015D	R62691	1	9/24/2012 12:13:44 PM		A
LCS-53923	-----	M8015D	53923	1	9/24/2012 12:22:14 PM	9/20/2012 10:21:31 AM	A
MB-53923	-----	M8015D	53923	1	9/24/2012 12:56:10 PM	9/20/2012 10:21:31 AM	A
1209152-01C	LC38-DSPL-MW-002-0912	M8015D	53923	1	9/24/2012 1:13:07 PM	9/20/2012 10:21:31 AM	A
1209152-02C	LC38-DSPL-MW-003-0912	M8015D	53923	1	9/24/2012 1:21:35 PM	9/20/2012 10:21:31 AM	A
1209152-03C	LC38-DSPL-RB-001-0912	M8015D	53923	1	9/24/2012 1:30:03 PM	9/20/2012 10:21:31 AM	E
CCV1-120924	-----	M8015D	R62691	1	9/24/2012 1:55:26 PM		A
CCV2-120924	-----	M8015D	R62691	1	9/24/2012 3:37:09 PM		A
1209152-01CMS	LC38-DSPL-MW-002-0912MS	M8015D	53923	1	9/24/2012 4:10:59 PM	9/20/2012 10:21:31 AM	A
1209152-01CMSD	LC38-DSPL-MW-002-0912MSD	M8015D	53923	1	9/24/2012 4:19:26 PM	9/20/2012 10:21:31 AM	A
CCV3-120924	-----	M8015D	R62691	1	9/24/2012 4:27:53 PM		A

**Lab Order:** 1209152  
**Client:** Zia Engineering & Environmental  
**Project:** LC-38 Diesel Spill

## Sequence Report

**Run ID: ICP-MS3\_120924B**

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
BLANK STD 1	----	SW6020A	R62689	1	9/24/2012 11:35:00 AM		A
1/20 ppb STD.	----	SW6020A	R62689	1	9/24/2012 11:41:00 AM		A
10/200 ppb STD.	----	SW6020A	R62689	1	9/24/2012 11:47:00 AM		A
50/1000 ppb STD.	----	SW6020A	R62689	1	9/24/2012 11:52:00 AM		A
100/2000 ppb STD.	----	SW6020A	R62689	1	9/24/2012 11:58:00 AM		A
250/5000 ppb STD.	----	SW6020A	R62689	1	9/24/2012 12:03:00 PM		A
500/10000 ppb STD.	----	SW6020A	R62689	1	9/24/2012 12:09:00 PM		A
2000/25000 ppb STD.	----	SW6020A	R62689	1	9/24/2012 12:14:00 PM		A
ICSAB-120924	----	SW6020A	R62689	1	9/24/2012 12:36:00 PM		A
ICSA-120924	----	SW6020A	R62689	1	9/24/2012 12:52:00 PM		A
ICV1-120924	----	SW6020A	R62689	1	9/24/2012 1:03:00 PM		A
LCVL-120924	----	SW6020A	R62689	1	9/24/2012 1:29:00 PM		A
ICB1-120924	----	SW6020A	R62689	1	9/24/2012 1:34:00 PM		A
MB-53942	----	SW6020A	53942	1	9/24/2012 1:40:00 PM	9/21/2012 8:47:14 AM	A
LCS-53942	----	SW6020A	53942	1	9/24/2012 1:45:00 PM	9/21/2012 8:47:14 AM	A
LCSD-53942	----	SW6020A	53942	1	9/24/2012 1:51:00 PM	9/21/2012 8:47:14 AM	A
1209152-01A	LC38-DSPL-MW-002-0912	SW6020A	53942	1	9/24/2012 2:02:00 PM	9/21/2012 8:47:14 AM	A
1209152-01A SD	LC38-DSPL-MW-002-0912	SW6020A	53942	5	9/24/2012 2:08:00 PM	9/21/2012 8:47:14 AM	A
1209152-01A PDS	LC38-DSPL-MW-002-0912	SW6020A	53942	1	9/24/2012 3:04:00 PM	9/21/2012 8:47:14 AM	A
1209152-01A MS	LC38-DSPL-MW-002-0912MS	SW6020A	53942	1	9/24/2012 3:09:00 PM	9/21/2012 8:47:14 AM	A
1209152-01A MSD	LC38-DSPL-MW-002-0912MSD	SW6020A	53942	1	9/24/2012 3:15:00 PM	9/21/2012 8:47:14 AM	A
CCV1-120924	----	SW6020A	R62689	1	9/24/2012 3:31:00 PM		A
LCVL1-120924	----	SW6020A	R62689	1	9/24/2012 3:54:00 PM		A
CCB1-120924	----	SW6020A	R62689	1	9/24/2012 4:05:00 PM		A
1209152-02A	LC38-DSPL-MW-003-0912	SW6020A	53942	1	9/24/2012 4:49:00 PM	9/21/2012 8:47:14 AM	A
1209152-03A	LC38-DSPL-RB-001-0912	SW6020A	53942	1	9/24/2012 4:54:00 PM	9/21/2012 8:47:14 AM	E
CCV2-120924	----	SW6020A	R62689	1	9/24/2012 5:39:00 PM		A
LCVL2-120924	----	SW6020A	R62689	1	9/24/2012 6:06:00 PM		A
CCB2-120924	----	SW6020A	R62689	1	9/24/2012 6:17:00 PM		A



**Lab Order:** 1209152  
**Client:** Zia Engineering & Environmental  
**Project:** LC-38 Diesel Spill

## Sequence Report

**Run ID: UV/VIS\_2\_120920A**

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
ICV-120920	-----	M3500-Cr D	R62636	1	9/20/2012 11:08:00 AM		A
MB-53921	-----	M3500-Cr D	53921	1	9/20/2012 11:08:00 AM	9/20/2012 10:00:22 AM	A
LCS-53921	-----	M3500-Cr D	53921	1	9/20/2012 11:09:00 AM	9/20/2012 10:00:22 AM	A
LCSD-53921	-----	M3500-Cr D	53921	1	9/20/2012 11:12:00 AM	9/20/2012 10:00:22 AM	A
1209152-01B	LC38-DSPL-MW-002-0912	M3500-Cr D	53921	1	9/20/2012 11:12:00 AM	9/20/2012 10:00:22 AM	A
1209152-01B MS	LC38-DSPL-MW-002-0912MS	M3500-Cr D	53921	1	9/20/2012 11:12:00 AM	9/20/2012 10:00:22 AM	A
1209152-01B MSD	LC38-DSPL-MW-002-0912MSD	M3500-Cr D	53921	1	9/20/2012 11:12:00 AM	9/20/2012 10:00:22 AM	A
1209152-02B	LC38-DSPL-MW-003-0912	M3500-Cr D	53921	1	9/20/2012 11:12:00 AM	9/20/2012 10:00:22 AM	A
1209152-03B	LC38-DSPL-RB-001-0912	M3500-Cr D	53921	1	9/20/2012 11:12:00 AM	9/20/2012 10:00:22 AM	E
CCV-120920	-----	M3500-Cr D	R62636	1	9/20/2012 11:16:00 AM		A